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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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23517	7590	06/01/2006		EXAMINER
BINGHAM MCCUTCHEN LLP				HO, CHUONG T
3000 K STREET, NW				
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WASHINGTON, DC 20007				2616

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/772,959	TEIXEIRA, JOE	
	Examiner	Art Unit	
	CHUONG T. HO	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 July 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 January 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/14/05.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

1. The amendment filed 07/14/05 have been entered and made of record.
2. Applicant's amendment filed 07/14/05 with the respect to independent claims 1, 13, 25 have been considered but they are moot in view of the new ground (s) of rejection .
3. Claims 1-36 are pending.

Claim Objections

4. Claims 1, 13, 25 are objected to because of the following informalities: the acronym CLEC needs to be spelled out. Appropriate correction is required.
5. Claims 2-3, 9-12, 14-15, 21-24, 26-27, 33-36 are objected to because of the following informalities: the acronym MDF needs to be spelled out. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2-12, 13, 14-24, 25, 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zitting et al. (U.S. Patent No. 6,584,148 B1) in view of Dunn et al. (U.S. Patent No. 6,072,793) and in further view of Swam (U.S. Patent No. 6,831,930 B1).

In the claim 1, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (see figure 1, customer premises 30) via a CLEC any-to-any cross-connect switch (see figure 1, loop management 26) connected to a CLEC (see col. 1, line 45, CLECs) digital subscriber line access multiplexer (see figure 1, DSLAM 28) connected to digital telecommunication network, the cross connect switch (see figure 1, loop management 26) supply a connection between data processing equipment of the first subscriber (customer premises 30) and the digital subscriber line access multiplexer (see figure 1, DSLAM 28) (see col. 9, lines 1-9, lines 44-50);

In response to receiving the indication at the network management system (see figure 1, loop management device 26), transmitting a command (the start test signal) to the cross connect switch (see figure 1, loop management device 26) to switch out the connection of the data processing equipment of first subscriber (customer premises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and

In response to receiving the command (see col. 9, lines 1-9, the start test signal) at the cross-connect switch (see figure 1, loop management device 26) , switching out the connection of the data processing equipment of first subscriber (see figure 1, customer premises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (see figure 1, controller 10) connected to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (controller 10), transmitting a command to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Both Zitting and Dunn disclose the DSL and switch. Dunn recognizes receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

However, the combined system (Zitting – Dunn) is silent to disclosing the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office.

Swam discloses the cross-connect switch (see figure 1, cross-connect 64) connected between the digital subscriber line access multiplexer (see figure 1, DSLAM) and a collocation arrangement (see figure 1, co-location panel 502) demarcation in a central office (see figure 1, col. 2, lines 50-65).

Both Zitting, Dunn, and Swam discloses cross-connect and DSL. Swam recognizes the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the

combined system (Zitting-Dunn) with the teaching of Swam to provide the collocation arrangement demarcation in order to connect the central office MDF to the cross connect switch.

8. In the claim 13, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (customer premises 30) via a CLEC (see col. 1, line 45; local exchange carriers, CLECs) any-to-any cross-connect switch (see figure 1, loop management device 26) connected to a digital subscriber line access multiplexer (see figure 1, DSLAM 28) connected to digital telecommunication network, the cross connect switch (see figure 1, loop management device 26) supply a connection between data processing equipment of the first subscriber (see figure 1, customer premises 30) and the digital subscriber line access multiplexer (see figure 1, DSLAM 28) (see col. 9, lines 1-9, lines 44-50);
In response to receiving the indication at the network management system (see col. 1, loop management device 26), transmitting a command (see col. 9, lines 1-9, the start test signal) to the cross connect switch (see figure 1, loop management 26) to switch

out the connection of the data processing equipment of first subscriber (see figure1, customer primises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and In response to receiving the command (see col. 9, lines 1-9, the start test signal) at the cross-connect switch (see figure 1, loop management 26) , switching out the connection of the data processing equipment of first subscriber (see figure 1, customer primises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (see figure 1, network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (controller 10) connected to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (see figure 1, controller 10), transmitting a command to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (col. 3, lines 46-55, lines 9-16, to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

However, the combined system (Zitting – Dunn) is silent to disclosing the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office.

Swam discloses the cross-connect switch (see figure 1, cross-connect 64) connected between the digital subscriber line access multiplexer (see figure 1, DSLAM) and a collocation arrangement (see figure 1, co-location panel 502) demarcation in a central office (see figure 1, col. 2, lines 50-65).

Both Zitting, Dunn, and Swam discloses cross-connect and DSL. Swam recognizes the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the collocation

arrangement demarcation in order to connect the central office MDF to the cross connect switch.

9. In the claim 25, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (see figure 1, customer premises 30) via an any-to-any cross-connect switch (see figure 1, loop management 26) connected to a digital subscriber line access multiplexer (see figure 1, DSLAM 28) connected to digital telecommunication network, the cross connect switch (see figure 1, loop management 26) supply a connection between data processing equipment of the first subscriber (see figure 1, customer premises 30) and the digital subscriber line access multiplexer (see figure 1, DSLAM 28) (see col. 9, lines 1-9, lines 44-50);

In response to receiving the indication at the network management system (see figure 1, loop management device 26), transmitting a command (col. 9, lines 1-9, the start test signal) to the cross connect switch (see figure 1, loop management 26) to switch out the

connection of the data processing equipment of first subscriber (see figure 1, customer premises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and

In response to receiving the command (see col. 9, lines 1-9, the start test signal) at the cross-connect switch (see figure 1, loop management 26) , switching out the connection of the data processing equipment of first subscriber (see figure 1, customer premises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (controller 10) connected to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (see figure 1, controller 10), transmitting a command to the cross connect switch (see figure 1, AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

However, the combined system (Zitting – Dunn) is silent to disclosing the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office.

Swam discloses the cross-connect switch (see figure 1, cross-connect 64) connected between the digital subscriber line access multiplexer (see figure 1, DSLAM) and a collocation arrangement (see figure 1, co-location panel 502) demarcation in a central office (see figure 1, col. 2, lines 50-65).

Both Zitting, Dunn, and Swam discloses cross-connect and DSL. Swam recognizes the cross-connect switch connected between the digital subscriber line access multiplexer and a collocation arrangement demarcation in a central office. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the collocation

arrangement demarcation in order to connect the central office MDF to the cross connect switch.

10. In the claims 2, 14, 26, the combined system (Zitting-Dunn) discloses the limitations of claim 1 above.

However, the combined system is silent to disclosing the collocation arrangement demarcation connected to the cross-connect switch and a patch line connecting the central office MDF to the collocation arrangement demarcation.

Swam discloses the collocation arrangement demarcation (see figure 1, Co-location Panel 502, Co-location Panel 504) connected to the cross connected switch (see figure 1, cross-connect 64) and a patch line connecting the central office MDF (see figure 1, MDF 12) to the collocation arrangement demarcation (see figure 1, Co-location Panel 502, Co-location Panel 504) (see col. 2, lines 50-65).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the collocation arrangement demarcation in order to connect the central office MDF to the cross connect switch.

11. In the claims 3, 15, 27, the combined system (Zitting-Dunn) discloses the limitations of claim 2 above.

However, the combined system is silent to disclosing the collocation arrangement demarcation connected to the cross-connect switch and a patch line connecting the central office MDF to the collocation arrangement demarcation.

Swam discloses the collocation arrangement demarcation (see figure 1, Co-location Panel 502, Co-location Panel 504) connected to the cross connected switch (see figure 1, cross-connect 64) and a patch line connecting the central office MDF (see figure 1, MDF 12) to the collocation arrangement demarcation (see figure 1, Co-location Panel 502, Co-location Panel 504) (see col. 2, lines 50-65).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the collocation arrangement demarcation in order to connect the central office MDF to the cross connect switch.

the admitted prior art discloses the connection between the data processing equipment of the first subscriber and the central office MDF (106) is unshared (see figure 1, the admitted prior art).

12. In the claims 4, 16, 28, the admitted prior art discloses the cross-connect switch is connected to a port of the digital subscriber line access multiplexer (DSLAM) (see figure 1).

13. In the claims 5, 17, 29, Dunn et al. discloses the step of switching out the connection of the data processing equipment of first subscriber to the digital access multiplexer frees up the port of the digital subscriber line access multiplexer (see figure 1, col. 3, lines 50-56, lines 9-15).

14. In the claims 6, 18, 30, Dunn et al. discloses receiving, at a network management system connected to the cross connect switch, an indication that a second subscriber

has initiated service; in response to receiving the indication at the network management system, transmitting a command to the cross connect switch to connect data processing equipment of second subscriber to the digital access multiplexer; and in response to receiving the command at the cross-connected switch, connecting the data processing equipment of the second subscriber to the digital access multiplexer (see figure 1, col. 3, lines 50-56).

15. In the claims 7, 19, 31, Dunn et al. discloses the cross-connect switch is connected to a port of the digital subscriber line access multiplexer and the step of switching out the connection of the data processing equipment of the first subscriber to the digital access multiplexer frees up the port of the digital subscriber line access multiplexer (see figure 1, col. 3, lines 50-56).

16. In the claims 8, 20, 32, Dunn et al. discloses connecting the data processing equipment of the second subscriber to the port of the digital subscriber line access multiplexer that was freed up by the step of switching out the connection of the data processing equipment of first subscriber to the digital access multiplexer (see figure 1, col. 3, lines 50-56).

17. In the claims 9, 21, 33, Dunn et al. discloses the connection between data processing equipment of the first subscriber and the digital subscriber line access multiplexer comprises a central office MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation (see figure 1, col. 3, lines 50-56).

18. In the claims 10, 22, 34, the combined system (Zitting – Dunn) discloses the limitations of claim 9 above.

However, the combined system (Zitting – Dunn) is silent to disclosing the connection between the data processing equipment of the first subscriber and the central office MDF is unshared.

Swam discloses the connection between the data processing equipment of the first subscriber and the central office MDF (106) is unshared (see figure 1).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the connection between the data processing equipment of the first subscriber and the central office MDF is unshared in order to connect the central office MDF to the cross connect switch.

19. In the claims 11, 23, 35, the combined system (Zitting – Dunn) discloses the limitations of claim 10 above.

However, the combined system is silent to disclosing the connection between data processing equipment of the second subscriber and the digital subscriber line access multiplexer comprises a central office MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation.

Swam discloses the connection between data processing equipment of the second subscriber and the digital subscriber line access multiplexer comprises a central office

MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation (see figure 1).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the connection between data processing equipment of the second subscriber and the digital subscriber line access multiplexer comprises a central office MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation in order to connect the central office MDF to the cross connect switch.

20. In the claims 12, 24, 36, the combined system (Zitting – Dunn) discloses the limitations claim 11 above.

However, the combined system (Zitting – Dunn) is silent to disclosing the connection between the data processing equipment of the second subscriber and the central office MDF is unshared (see figure 1).

Swam discloses the connection between the data processing equipment of the second subscriber and the central office MDF (106) is unshared (see figure 1).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of Swam to provide the connection between the data processing equipment of the second

subscriber and the central office MDF is unshared in order to connect the central office MDF to the cross connect switch.

21. In the claim 14, claim 14 is rejected the same reason of claim 2 above.
22. In the claim 15, claim 15 is rejected the same reason of claim 3 above.
23. In the claim 16, claim 16 is rejected the same reason of claim 4 above.
24. In the claim 17, claim 17 is rejected the same reason of claim 5 above.
25. In the claim 18, claim 18 is rejected the same reason of claim 6 above.
26. In the claim 19, claim 19 is rejected the same reason of claim 7 above.
27. In the claim 20, claim 20 is rejected the same reason of claim 8 above.
28. In the claim 21, claim 21 is rejected the same reason of claim 9 above.
29. In the claim 22, claim 22 is rejected the same reason of claim 10 above.
30. In the claim 23, claim 23 is rejected the same reason of claim 11 above.
31. In the claim 24, claim 24 is rejected the same reason of claim 12 above.
32. In the claim 26, claim 26 is rejected the same reason of claim 2 above.
33. In the claim 27, claim 27 is rejected the same reason of claim 3 above.
34. In the claim 28, claim 28 is rejected the same reason of claim 4 above.
35. In the claim 29, claim 29 is rejected the same reason of claim 5 above.
36. In the claim 30, claim 30 is rejected the same reason of claim 6 above.
37. In the claim 31, claim 31 is rejected the same reason of claim 7 above.
38. In the claim 32, claim 32 is rejected the same reason of claim 8 above.
39. In the claim 33, claim 33 is rejected the same reason of claim 9 above.
40. In the claim 34, claim 34 is rejected the same reason of claim 10 above.

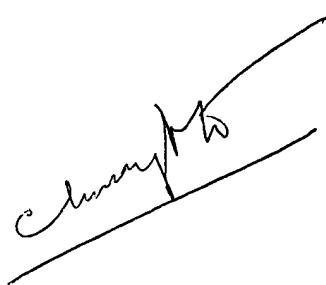
41. In the claim 35, claim 35 is rejected the same reason of claim 11 above.
42. In the claim 36, claim 36 is rejected the same reason of claim 12 above.
43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S.Patent No. 6,347,075 B1; 6,868,060 B2; 6836,509 B1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/27/06

A handwritten signature in black ink, appearing to read "Chuong T. Ho", is written over a diagonal line.